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ABSTRACT

This paper reviews eight major problem areas concerning testing practices of interest to professionals practicing psychology in the schools. These areas, identified by the Task Force on Psychology in the Schools of the American Psychological Association, include: (1) test use; (2) diagnostic versus placement tests; (3) informed parental consent for special education placement; (4) inappropriate placement of minority children in special education; (5) decision-making data regarding individual differences for educational placement and procedures; (6) population test validity issues; (7) quality and appropriate use of tests; and (8) the development of assessment procedures to determine children's educational needs. Attention is also given to seven action areas identified by the Task Force which would address these problems. The remaining portions of this paper discuss challenges faced by professional psychologists in converting research knowledge into improved school testing practices, specifically, improving the assessment and analysis of student's learning abilities and language skills through dynamic assessment of cognitive skills and assessment of communicative competence. Attention is called to improving and updating the scientific knowledge-base of professional psychologists, improving schools' capabilities to monitor and manage implementation of innovative testing practices, and to fostering collaborative relationships between school psychologists and academic researchers on testing innovations. (PN)

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Testing in the Schools: Scientific Challenges to Practice and Policy Implications

Abstract

The paper reviews 8 major problem areas concerning testing practices of interest to professionals practicing psychology in the schools. These areas were identified by the Task Force on Psychology in the Schools of the American Psychological Association. Attention is also given to 7 action areas identified by the Task Force which would address these problems. The remaining portions of the paper discuss challeneges faced by professional psychologists in converting research knowledge into improved school testing practices. Attention is called to improving and updating the scientific knowledge-base of professional psychologists, improving schools' capabilities to monitor and manage implementation of innovative testing practices, and to fostering collaborative relationships between school psychologists and academic researchers on testing innovations.

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Testing in the Schools: Scientific Challenges to Practice and Policy Implications

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Overview

In formulating its charge, the Task Force on Psychology in the Schools gave attention to questions surrounding the use of tests and other forms of assessments within schools. In this talk I will discuss some of the concerns of the Task Force in the area of assessment. I will also present some of my own views on emerging research on new forms of testing and assessment and the implications I see that scientific aspects of these developments might have on concerns raised by the Task Force.

I will start my presentation by reviewing 8 areas of concern regarding assessment which the Task Force has noted in its activities. These areas involve problems and issues confronting school psychologists required to administer tests and to perform assessments in schools. These areas span both professional and scientific concerns. Subsequent to this outline of issues, I will review a series of 7 activities identified by the Task Force which would contribute to resolution of the problems and issues in testing and assessment in the schools which it has identified.

Following this discussion, I will comment on 2 areas of ongoing research which suggest possibilities for improved assessment and analysis of student's learning abilities and language skills. These two areas of research are dynamic assessment of cognitive skills and assessment of communicative competence. As I will point out, developments in these two areas of research have implications for new testing and assessment techniques. And indeed, school psychologists in some of our schools are being asked at present to design and deliver innovative assessment services to children based on this research. Within the everyday contexts of schools, school psychologists, and other certified practitioners of psychology in schools are those professionals best qualified by training to address the conversion of research findings into professionally responsible and scientifically valid assessment practices. It is my own view that the growth of scientific knowledge in cognitive psychology, instructional psychology, and innovative assessment is so rapid and intensive that the scientific training of school psychologists and other psychological practitioners in schools should be intensified and extended to meet this challenge. At the same time, it will be important to note that school systems and their governing bodies themselves have the responsibility of creating guidelines and procedures assuring professional and scientific accountability when new assessment procedures are introduced into schools. I will close my presentation by commenting on 3 scientific challenges I see faced by school psychologists as translators of research findings into assessment practices conducted in schools.

Task Force Concerns Surrounding Testing

The professional responsibilities of school psychologists vary considerably in terms of the services they might deliver to children and schools. Regardless of how this diversity occurs, assessment of atypical school children's intellectual and behavioral characteristics is always a central concern. In addition this central role of assessment in services delivered by school psychologists is historically associated closely with identifying, diagnosing, and educationally placing children who are performing much more poorly than other children of the same age in school. Over the past decade Federal Policy initiatives, such as PL 94-142, and procedures mandated in implementing these policies have had a major impact on many of the assessment services requested of school psychologists. The Task Force has identified 8 major problems and issues involving school psychologists' and other professional psychologists' use and interpretation of tests and assessments. The following list of issues, while focussing on special education-related matters and other concerns of school psychologists, offers some important general concerns pertinent to a broader range of assessment services requested of psychologists practicing in schools. The list is not meant to be exhaustive, but it is intended to summarize exemplary concerns faced by school psychologists throughout the country:

(1) Protection of children (and parents) when the Superintendent of an LEA or a court abolishes use of tests involving additional issues such as follows:

   (a) What about the use of unvalidated tests?
   (b) How does one insure use of tests or procedures in accordance with professional testing guidelines?
   (c) Need for accountability to standards

(2) Differentiating the use of tests for diagnosis versus placement purposes. Confusion of steps in the assessment placement process--e.g., diagnosis is not always equal to evidence for valid placement.

(3) Importance of informed consent documents for presentation to parents regarding special education placement.

(4) Possibility of damaging consequences if minority children are

placed inappropriately in special education.

(5) What data about individual differences are required to make the most appropriate decisions about various educational programs and procedures for children? When IQ tests are included as one source of information in this assessment process, are there not persuasive reasons for assuring their availability to school psychologists, and children, and youth?

(6) The question of population validity of tests is not settled. Research is needed at the item and test score levels oriented towards study of the construct and predictive validity of tests, especially as they pertain to the impact of language and other background factors on assessment.

(7) Public, judiciary, and educational system failure to acknowledge scientific evidence on the quality and appropriate use of tests.

(8) Development of new assessment procedures in accordance with existing replicated scientific evidence for determining children's educational needs.

Task Force recommendations for Action

In response to the foregoing exemplary problems and issues concerning testing and assessment, the Task Force has identified 7 areas of action which would contribute to alleviating these concerns. These calls to action include actions which would:

(1) Encourage implementation of suitable screening procedures that would provide preliminary identification of all children who may need some kind of special education help.

(2) Develop models for early identification, referral, diagnosis and placement procedures that provide for informed consent, and rights to review and re-evaluation.

(3) Consider the present definition of "handicapped". Are the present special education categories reflective of our best knowledge of handicapping conditions that require special education? What is the research evidence, if any?

(4) Identify the potential rewards and benefits of special education, e.g., early learning of total communication for the deaf, or the value of keeping a child or youth in school vs. vocational training vs. drop out approaches.

(5) Articulate the best procedures and practices for providing special education services, services to minorities, and service to other identified groups, consistent with APA standards and current knowledge regarding assessment.

(6) Encourage continued research on population validity issues and disseminate scientific guidelines for interpreting group tests score (item performance) differences.

(7) Disseminate accurate summaries of research information in meaningful ways to appropriate audiences: (a) Networking; (b) continuing education.

Two Research Areas With a Growing Impact on Assessment

Dissatisfaction with the theoretical soundness and practical value of standardized tests of intelligence and language proficiency tests has grown in some quarters over the past few years. I will here focus on directions for enhanced assessment which are receiving current scientific attention in these two areas of assessment. In both instances the target children for improved assessment are children who might be identified as eligible for special education or else eligible for bilingual education programs based on low school achievement or failure to participate in classrooms as expected. I will not discuss legal and court mandated school policy and interpretations of policy regarding use of existing standardized tests at any length since this topic is complex and merits separate attention.

Assessment of intelligence. Current scientific dissatisfaction with the construct of intelligence as measured by standardized tests stems from the view that additional and more detailed information about children's learning ability, beyond a summary measure of student's general level of ability, would be useful to educators. In addition, many are concerned that standardized general intelligence tests are unduly sensitive to students' language and cultural background and that as a consequence assessment may have limited validity for some minority group students. Indeed, this latter issue has influenced court cases, such

as the Larry P. case, where a decision was rendered banning use of standardized intelligence tests for purposes of identifying Black children who might be in need of special education services within San Francisco schools.

Apart from concern about limitations in the population validity of intelligence tests, a primary thrust in the scientific movement to improve assessment of intelligence has focused on improving the qualitative knowledge about what intelligence is and how it might be stimulated. In this regard, a developmental paradigm for assessing intelligence is often alluded to. What is needed from this perspective are assessments of intelligence which identify strengths and weaknesses in specific intellectual skills of children and ways to assess children's potential to improve and develop specific skills. Recent reviews and discussions of theories and research contributing to development of new, dynamically-oriented measures of intelligence and cognitive skills are given by Campione, Brown, and Ferrara (1982), Feurstein (1980), Detterman and Sternberg (1982), Brooks, Sperber, and McCauley (1984), and Segal, Chipman, and Glaser (1985). A common ingredient in many of the approaches described by these sources is the assumption that there ought be a close and practical connection between assessing what children can and cannot do and potential training interventions. It is presumed, in that existing or else hypothetically identifiable interventions might be administered to children so that they can acquire new skills appropriate to their current level of cognitive development. Another frequent goal of these approaches is to determine conditions and methods aiding children in transferring acquired skills to new situations and domains of problem solving.

Very few investigators in this area are involved in development of innovative assessment systems for dissemination to school districts. One of those that is beginning to be used by schools is Feuerstein's Learning Potential Assessment Device (LPAD). The LPAD is important to note in the context of school psychology because it is intended specifically for diagnosis of intellectual functioning among students who manifest achievement deficits in their school behavior. The LPAD system appears to differ radically from assessment approaches utilizing standardized tests in that it stresses a clinical approach in which an examiner probes students' ability to perform specific cognitive and perceptual tasks represented by items drawn from a test battery. In conducting the assessment, an examiner probes students' ability to utilize skills autonomously or else to manifest skills following mediating hints and suggestions offered by the examiner. The outcome of administering the

LPAD is a profile describing student's strengths and weaknesses, and growth potential in performing specific cognitive functions thought to be critical to learning and reasoning in school contexts. Training on skills assessed as deficient by means of the LPAD is provided by exercises forming Feuerstein's Instrumental Enrichment program. Researchers such as Arbitsman-Smith, Haywood, and Bransford (1984) who have investigated effectiveness of the LPAD method along with training procedures taken from the Instrumental Enrichment program have been able to produce evidence of gains in children's skills as a result of cognitive training. At the same time, most investigators appear to be cautious about the extent to which Feuerstein's program or other's programs might prove to be effective in ordinary schooling contexts.

The existence of research and a literature describing research on enhancing assessment and training of cognitive skills has had a very definite impact on school districts such as those of San Francisco and Chicago which are actively attempting to comply with judicial actions mandating replacement of IQ testing for some children for special education purposes. All of the concerns raised by the Task Force that were listed at the start of this talk are relevant to consider in evaluating professional psychologists' and school districts' ability to implement new assessment procedures with professional and scientific credibility.

Assessment of language proficiency. Recent calls for enhancing assessment of language minority students' language proficiency for placement in programs providing language services show some parallels to trends calling for innovative assessments of intelligence and cognitive skills. Over the past 15 years or so, psychological, sociolinguistic, and anthroplogical research on children's language in everyday schooling and other contexts has raised some serious questions about the usefulness of standardized proficiency tests in common use. A common theme running across these perspectives is that ability to use a language is closely tied to students' ability to master communicative functions--e.g. asking and answering questions, making requests, reciting lesson material, etc.--that are instrumental to participation in classroom activities and classroom social life. Many language proficiency tests are criticized because they do not adequately focus on children's mastery of such important communicative functions and because they are perceived to focus too much on children's mastery of grammar, word formation, vocabulary, and word pronunciation. Researchers such as Canale and Swain (1980), Bachman and Palmer (1981), and Clark (1980) have argued that language proficiency assessment techniques need to be more diagnostic in nature and that

assessment contexts need to resemble criterion language use contexts as closely as is feasible. Canale and Swain (1980) and Canale (1984) outline areas of communicative competence meriting attention in language assessment. Beyond grammatical competence they point the need to assess: sociolinguistic competence (knowing how language form is related to social relationships and intentions), discourse competence (knowing how language form is used organize discourse into units serving expressive functions), and instrumental competence (knowing how to edit language on-line to improve communication as it is occurring). Bachman and Palmer (1981), among others, have conducted empirical assessment research verifying that it is possible to construct new batteries of language proficiency tests that go beyond assessing grammatical competence and that assess competencies similar to those cited by Canale and Swain. However, research on construction of communicative competence assessments for language minority children has just begun.

School personnel, particularly bilingual and ESL staff, who have learned about these preliminary attempts to improve proficiency tests are now asking when they can be put to practical use in classrooms. This need is especially felt in assessing the cognitive and linguistic language minority children who are not performing well in English language classrooms. Teachers and other school staff want to know whether such children should be considered for language services and/or for special education services. Professionals practicing psychology in the schools in this instance become an important resource contributing advice on how to configure assessment for language minority children--albeit that school ESL and bilingual program staff typically assume the responsibility for decisions on which language proficiency assessments to use.

Three Scientific Challenges Facing School Psychologists

Developments in assessment in areas such as those I've mentioned can have a number of impacts on practice of psychology in the schools; again I refer you to my earlier mention of the 8 areas of concern identified by the Task Force. In closing this talk, rather than focusing on reviewing this list, I will mention 3 concerns which I see stemming from professional psychologists' role as translators of research into school assessment practices. I mention these concerns because of my special interest in them.

The first concern is psychologists' responsibility to help interpret the scientific status of psychological and social science research findings and to help judge how these findings ought to affect actual school assessment practices. To be sure, school districts and state school systems

themselves have a responsibility to set standards of professional accountability and professional competence in these matters consistent with advice and standards rendered by professional and scientific organizations such as APA . However, psychologists in the schools are likely to be viewed by many as the best qualified individuals by their training to render advice on when and how to suggest alterations of assessment practices in light of developments in research. This question of judging how to translate research into assessment practice is a major one because of the proliferation of scientific knowledge with potential implications for assessment and because researchers outside of school settings are unprepared to tackle the combined scientific and practical problems of converting research into assessment practice. I am led to suggest two other subsidiary concerns which need attention in order to help resolve this main concern.

The first subsidiary concern is with updating and intensifying psychological practitioners' awareness of relevant theory and research in applied measurement and in psychology. Some of the new techniques for intellectual skills and language proficiency assessment which are being suggested do not conform well to models of assessment which psychological practitioners have come to expect for these domains of assessment. In addition, in the case of new areas of assessment such as dynamic assessment of intellectual functioning and communicative competence assessment, there just is not a very large accumulated body of research on the validity and reliability of assessment procedures within school settings. It seems obvious that the more psychological practitioners know about these techniques, and their applied measurement characteristics, the better practitioners are equipped to advise schools on the professional and scientific wisdom of proceding to implement new assessment procedures.

In making a suggestion for continual updating of professional psychologists' knowledge of research and measurement related developments, it should be noted in passing, that innovative assessment techniques are developing in some cases at a pace outstripping our capability to formulate appropriate testing standards. Until enough research and critical review of research has accumulated, it may not be possible to fully interpret the relevance of existing standards and to go beyond existing standards, if necessary, to introduce new standards for procedures such as dynamic skills assessment.

The foregoing comments lead me to my second subsidiary concern. Simply put, under the present scientific circumstances it would appear valuable for practicing psychologists in the schools to conduct some of the

needed reliability and validity research in collaboration with researchers whose base may not be in schools. Conduct of research on the psychometric validity of new assessment techniques within school settings seems essential in order to evaluate the scientific soundness of these new assessment techniques and it would seem especially appropriate to the extent it involves those student populations who are to be directly served by new assessment procedures. Collaboration with researchers who may not be psychologists practicing in the schools, but who have special knowledge of the theory and research base for new assessments seems a sensible step. Such collaborations in research would aid psychological practitioners in updating their knowledge of new techniques being suggested by researchers, and most importantly it would allow psychological practitioners to participate in the formulation and design of assessment at the level of theory building. It would allow psychological practitioners to guide innovative assessment research so that it would be better attuned to the realities of schools and the service delivery models which can be implemented in schools.

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